Serial No.: 10/796,726 U.S. PTO Customer No. 25280

Inventor(s): Ramesh Keshavaraj Case No.: 5714

REMARKS

The Pending Claims

Claims 1-3, 5-8, 10-16, 19, and 22-23 are currently pending in the application. Claims 3, 5, 6, 8 and 10 have been amended. Claims 4, 9, 17-18 and 20-21 have been canceled without prejudice or disclaimer.

Summary of the Office Action

The Office Action accepted drawing changes. It included:

- 1) Claims 1, 2, 3, 7, 8, 12-15, 19, 22 and 23 were rejected under section 103(a) as unpatentable over Soriano in view of Bauer; and
- 2) Claims 5, 6, 10, 11 and 16 were rejected under 103(a) over Soriano combined with Bauer and Lewis; and
- 3) There are no section 112 rejections.

Removal of Soriano Reference Under 37 CFR Section 1.131(a)

In the Declaration of Inventor Ramesh Keshavaraj, filed with this Amendment, sworn testimony is presented as such at paragraph 8:

"...[T]he invention of the present application, which is described below, was reduced to practice in the United States (in Georgia) prior to January 14, 2004. Attached in an invention record dated December 15, 2003 which shows the reduction to practice of the invention. Further, it references the lab notebook entries and CAD drawings that were prepared on about October 7, 2003. The invention record was signed and witnessed on December 15, 2003. It also was notarized on December 15, 2003."

This testimony and invention records of the inventor makes it clear that the invention of this application was reduced to practice in this country (USA) prior to the effective date of the Soriano reference. The publication date (effective date) of Soriano is January 14, 2004. As such, Soriano cannot be used as a reference against the present invention, for any purpose.

Serial No.: 10/796,726 U.S. PTO Customer No. 25280

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Rejection of Claims 1, 2, 3, 7, 8, 12-15, 19, 22 and 23: Soriano Combined with Bauer

As to the 103(a) rejection based upon Soriano/Bauer, it shall be discussed herein as a 103(a) rejection as to Bauer only, given that Soriano is removed.

The Bauer reference does not teach perpendicularly arranged sets of yarns, wherein the yarns of the front panel are at a bias to the yarns at in the rear panel. Further, Bauer clearly discloses a cylindrical shaped airbag. Bauer does not disclose non-circular front and rear panels, and instead, it discloses in Figures 5, and Figures 6-8 circular panels. See Declaration. Further, there is no disclosure in Bauer of non-circular panels that are cut so as to be disposed between a peripheral side panel that is connected to each side panel. Due to its configuration, Bauer suffers from some of the same drawbacks as much of the rest of the circular panel prior art. That is, Bauer does not solve the problem of inefficient nesting of circular side panels. Thus, there is no reason to believe that the "nesting" of the Bauer airbag portions would be any greater than the conventional circular nesting patterns.

The Bauer reference also is not adapted for solving the problem of weakness in the seam area, due to circular geometry with regard to yarn slip. See Declaration. The area near where the seam is sewed (the area where the warp and fill yarns are caught in the seam) is the weakest portion of the airbag perimeter. With circular airbags, only a very small length of yarn is caught in the process of airbag manufacture, in most instances, and as a result such a circular airbag with such sewn seams is capable of relatively easy and undesirable "yarn slip". "Yarn slip" is the undesirable slippage of yarn in the seam area, and based upon the design of Bauer, it is likely to suffer from yarn slip as do other conventional airbags with circular panels. See Declaration.

Bauer teaches away from the invention. Bauer does not teach panels placed at a bias angle with respect to front and rear panel orientation. Bauer teaches the use of an "elongated shape that allows the airbag to inflate rapidly". The airbag of the present invention is *not* elongated. In fact, the airbag of this invention, as seen in Figure 15 of the specification of this patent, does not show an elongated shape. See Declaration. In fact, the use of rectangular or square panels, in one embodiment of the

Serial No.: 10/796,726

Inventor(s): Ramesh Keshavaraj

U.S. PTO Customer No. 25280

Case No.: 5714

invention, instead of circular panels as in the prior art, causes a shape that is *less* elongated. Thus, Bauer teaches away from and directly opposite to that of the invention, in several respects. See Declaration.

Rejection of Claims 5, 6, 10, 11 and 16: Soriano/Bauer/Lewis

This rejection shall be discussed herein as a 103(a) rejection as to Bauer and Lewis only, given that Soriano is removed.

Claims 5 and 6, as amended above, claim the invention in an embodiment having front and rear panels of substantially rectangular or square configuration.

The Bauer reference does not teach yarns in the rear panel at a bias relative to yarns in the front panel. This feature is a feature of each claim, both independent, and also dependent, but is absent from the cited art. Bauer discloses a cylindrical shaped airbag. Bauer does not disclose non-circular front and rear panels, and instead, it discloses in Figures 5, and Figures 6-8 circular panels (opposite to that of the invention). The Bauer reference also is not adapted for solving the problem of weakness in the seam area, due to circular geometry with regard to yarn slip. See Declaration. The use in the invention of non-circular panels has provided unexpected results as compared to prior art circular shaped panels. Declaration, paragraph 11. Bauer teaches away from the invention. Bauer teaches the use of an "elongated shape that allows the airbag to inflate rapidly". The airbag of the present invention is not elongated. In fact, the airbag of this invention, as seen in Figure 15 of the specification of this patent, does not show an elongated shape. See Declaration. In fact, the use of rectangular or square panels, in one embodiment of the invention. instead of circular panels as in the prior art, causes a shape that is less elongated. Thus, Bauer teaches away from and directly opposite to that of the invention, in several respects. See Declaration.

The Lewis reference apparently is cited and combined with Bauer to add the feature of concave sides and rounded corners. Lewis also does not teach an airbag cushion comprising a front panel and a rear panel wherein the yarns in the front panel

Serial No.:

10/796,726

Inventor(s):

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U.S. PTO Customer No. 25280

Case No.: 5714

and rear panel are at a bias with respect to each other. Thus, one of skill in the art would attach the panels randomly, with respect to yarn orientation, and this would result in an inferior airbag.

The combination of Bauer (elongated shape and circular end panels) with Lewis (random orientation of panels relative to each other) would result in an airbag with random orientation with respect to bias, i.e. yarn orientation relative to the front and rear panels, and with an undesirable, elongated shape (as taken from teachings of Bauer). This would <u>not</u> result in the claimed invention. Thus, this combination does not even establish a *prima facie* case of obviousness, as all of the elements or features of the claimed invention are not present in the combination cited.

Summary

It is respectfully requested that the application be passed to allowance.

Fee Authorization: In the event that there are additional fees associated with the submission of these papers, Applicant hereby authorizes the Commissioner to withdraw those fees from our Deposit Account No. 04-0500.

Extension of Time: In the event that additional time is required to have the papers submitted herewith for the above referenced application to be considered timely, Applicant hereby petitions for any additional time required to make these papers timely and authorization is hereby granted to withdraw any additional fees necessary for this additional time from our Deposit Account No. 04-0500.

Respectfully submitted,

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